Listing of Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) Apparatus comprising:
- a first component configured to perform a route look-up to identify a proxy egress port by which a data packet is to leave the first component, to send an Address Resolution Protocol

 (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port, and to forward-data based on a lookage into reaching table and to replace a destination address in an Ethernet header of the data to identify a second component label the data packet with information identifying the hardware address of the egress port;

the a second component comprising the egress port and configured to receive the data packet; and

an intermediate component bridging the first component and the second component to forward the data <u>packet</u> based on the <u>replaced destination</u> hardware address of the egress port.

- 2. (Currently Amended) The apparatus of claim 1 <u>further</u> comprising additional intermediate components bridging the first component and the second component to forward the data.
- 3. (Original) The apparatus of claim 1 wherein the first component is configured to receive a packet from a first host and the second component is configured to deliver the packet to a second host.
- 4. (Currently Amended) The apparatus of claim 3 wherein the routing table used to set a path from the first component to the second component identify the egress port is computed by determining identifying a port that leads to the second host.
- 5. (Currently Amended) The apparatus of claim 3 wherein:

 the data comprises a request for an address to which to

 send the packet;

the first component is configured to <u>forward broadcast</u> the ARP request;

the intermediate component in the path is configured to forward the ARP request to the second component without looking up the a routing table look-up; and

the second component is configured to receive the ARP request and to send its send the response that includes the hardware address back to the first component.

- 6. (Currently Amended) The apparatus of claim 1 wherein the data is part of a packet, and the first component is configured to encapsulate the packet with the hardware address of the second component and to forward the encapsulated data packet through the intermediate component to the second component.
- 7. (Currently Amended) The apparatus of claim 6 wherein the intermediate component acts as a transparent bridge to forward the ARP request and the encapsulated data packet.
- 8. (Currently Amended) The apparatus of claim 6 wherein the second component is configured to route the encapsulated data packet received through the intermediate component to a second host.
- 9. (Original) The apparatus of claim 1 wherein the first component, the intermediate component, and the second component are connected through a network medium.
- 10. (Original) The apparatus of claim 9 wherein the network medium comprises Ethernet.
 - 11. (Canceled)
 - 12. (Currently Amended) A method comprising:

 performing a lookup in a routing table to determine a path

to send a proxy egress port by which data from a sender is to leave a component to a receiver;

which the data is to leave a networking router architecture to reach a receiver;

receiving a reply to the request, the reply including the address of the egress component;

replacing a destination address in an Ethernet header of

labeling the data with the address to identify a second

component connected to the receiver the egress component; and

forwarding the data, based on the replaced destination address, through an intermediate component between a first component connected to the sender and the second component to the egress component.

13. (Currently Amended) The method of claim 12 further comprising:

<u>forwarding</u> wherein the data <u>is forwarded through additional</u>

<u>intermediate components</u> without looking up the <u>a</u> routing table

<u>look up through additional intermediate components between the</u>

<u>first component and the second component</u>.

14. (Currently Amended) The method of claim 12 further comprising[[:]]

sending a packet from the sender to the first component;

and

the address of the second egress component from the first intermediate component.

15. (Currently Amended) The method of claim 14 further comprising:

forwarding the request for the address through the intermediate component; and

sending a the reply from the second-component egress component to the intermediate component; and

forwarding the reply from the intermediate component without looking up the routing table to the first component that sent the request for the address.

16. (Currently Amended) The method of claim 12 wherein:

labeling the data with the address further comprising:

comprises encapsulating the data comprising a data packet with a media access control (MAC) address information of the second egress component; and

forwarding the data comprises forwarding the encapsulated data packet to the second egress component through the intermediate component without looking up the a routing table look-up.

17. (Currently Amended) The method of claim 16 further comprising:

routing the <u>data</u> packet from the <u>second</u> <u>egress</u> component to the receiver.

18. (Currently Amended) An article comprising one or more machine-readable media that store machine-executable instructions for causing one or more machines to:

perform a look up in a routing table to determine a path to send a proxy egress port by which data from a sender is to leave the one or more machines to a receiver;

send a request for a media access control (MAC) address of

an egress component by which the data is to leave a networking

router architecture to reach a receiver;

receive a reply to the request, the reply including the MAC address of the egress component;

replace a destination address in an Ethernet header of

label the data with the MAC address of to identify a second the

egress component connected to the receiver; and

forward the data, based on the replaced-destination MAC address, through an intermediate component between a first component connected to the sender and to the second egress component.

19. (Canceled)

20. (Previously Presented) The article of claim 18 further causing the one or more machines to:

send receive the data in a packet from the sender to the first component; and

<u>route broadcast</u> the data comprising a request for an the

<u>MAC</u> address of the second <u>egress</u> component from the first

intermediate component.

- 21. (Canceled)
- 22. (Previously Presented) The article of claim 18 further causing the one or more machines to:

encapsulate a packet comprising the data comprising a

packet with the MAC address information of the second component;
and

forward the encapsulated packet to the second egress component through the intermediate component without looking up the a routing table look-up.

23. (Previously Presented) The article of claim 22 further causing the one or more machines to:

route the packet from the second egress component to the receiver.

24. (Previously Presented) The apparatus of claim 1 wherein the apparatus comprises a modularized network element

that includes the first component, the second component, and the intermediate component, the position of the components in the network element changing based on a path of the data.

- 25. (Canceled) .
- 26. (Currently Amended) The method of claim 12 wherein performing the lookup to determine the path comprises performing the lookup to determine the path in a modularized network element that includes the first component, the second egress component[[,]] and the intermediate component, wherein the position of the components in the network element changing changes based on the path.
 - 27. (Canceled)
- 28. (Previously Presented) The article of claim 18 further causing the one or more machines to:

network element that includes the first component, the second egress component[[,]] and the intermediate component, wherein the position of the components in the network element changing changes based on the path.

29. (Canceled)